Bandpass Filter

ZABP-4R5+

 50Ω 2 to 7 MHz

The Big Deal

- · High rejection
- Good VSWR
- Connectorized package



CASE STYLE: UU1842

Product Overview

ZABP-4R5+ is a 50Ω bandpass filter with a rugged connectorized package covering the passband of 2 to 7 MHz. The bandpass filter offers good matching within the passband and provides high rejection. This filter has miniature high Q capacitors and wire welded inductors for high reliability. It has repeatable performance across lots and consistent performance across temperature.

Key Features

Feature	Advantages		
High rejection	ZABP-4R5+ has sharper transition and rejects spurious signals in the stopband.		
Good VSWR	This filter maintains typical VSWR over passband frequency range making this filter easier to integrate into receiver and transmitter RF chains with less concerns for in band frequency ripple.		
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.		

Notes

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

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ZABP-4R5+



Connectors

SMA-M\F ZABP-4R5-S+

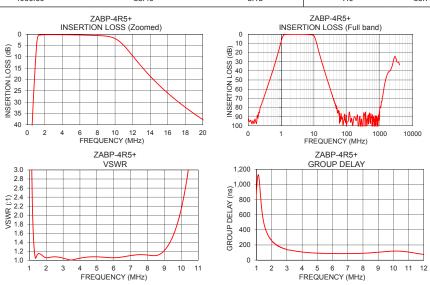
Electrical Specifications at 25°C							
Parai	meter	F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Center Frequency	-	-	-	4.5	-	MHz
Pass Band	Insertion Loss	F1-F2	2-7	-	0.5	1.5	dB
	VSWR	F1-F2	2-7	-	1.2	1.5	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 0.6	20	36	-	dB
Stop Bariu, Lower	VSWR	DC-F3	DC - 0.6	-	20	-	:1
		F4-F5	17 - 100	20	29	-	dB
	Insertion Loss	F5-F6	100 - 1000	60	80	-	dB
Stop Band, Upper		F6-F7	1000 - 1500	30	37	-	dB
		F7-F8	1500 - 4000	-	20	-	dB
	\/Q\//D	E4-E0	17 - 4000	_	20	_	-1

Maximum	Ratings
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1 W max.

Permanent damage may occur if any of these limits are exceeded.

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)	
0.10	91.10	54033.53	2.0	259.05	
0.60	36.59	293.39	2.2	218.96	
0.68	30.22	219.50	2.4	186.62	
0.82	20.03	89.81	2.6	169.07	
1.00	8.36	14.66	2.8	153.26	
1.10	3.52	4.69	3.0	136.38	
2.00	0.25	1.06	3.2	131.94	
4.50	0.28	1.07	3.4	125.09	
7.00	0.48	1.11	3.6	117.56	
9.50	1.23	1.53	3.8	111.47	
10.50	3.19	3.22	4.0	106.67	
12.00	9.53	10.35	4.2	102.37	
14.50	20.52	22.45	4.5	97.54	
17.00	29.26	27.46	4.6	96.00	
17.50	30.79	27.88	4.8	93.50	
100.00	96.60	34.48	5.0	91.67	
1000.00	80.34	33.42	5.2	89.98	
1500.00	50.25	8.87	5.4	88.74	
2100.00	39.53	2.47	6.0	86.31	
4000.00	33.40	3.13	7.0	85.76	

Typical Performance Data at 25°C



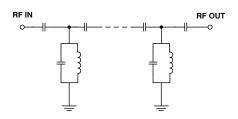
Features

- · High rejection
- Good VSWR, 1.2:1 typical@ passband
- · Connectorized package

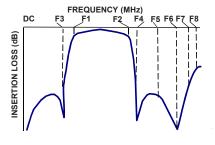
Applications

- Aviation
- · Communication systems
- Test equipment

Functional Schematic



Typical Frequency Response



+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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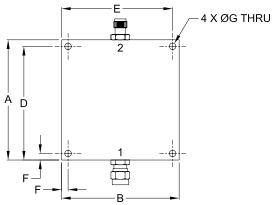
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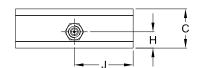
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Coaxial Connections

INPUT	SMA-MALE
OUTPUT	SMA-FEMALE

Outline Drawing





Outline Dimensions (inch mm)

E	D	С	В	Α
2.125	2.175	.750	2.250	2.300
53.98	55.25	19.05	57.15	58.42
4	J	ш	G	F
				•
grams	1.125	.312	.125	.125
124	28 58	7 93	3.18	3.18
	20.00	7.00		0.10

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